Data Sheet
Fujitsu PRIMERGY BX400 S1 Blade Server

Blade Made Easy

Fujitsu PRIMERGY BX Blade Servers provide a faster, simpler and lower-cost way to build and run an IT infrastructure in your midsize organization, branch office or large data center. The PRIMERGY BX system family is designed so that the chassis components can be used throughout the family. Server, storage and connection blades can be added or replaced without any additional cabling or administration effort. PRIMERGY Blade Servers provide maximum performance and maximum redundancy, but with only minimum space requirements and low power consumption. Business agility is achieved through simple, modular design and a large number of useful features that help reduce deployment time to hours or even only minutes. You can use thousands of applications and a large number of certified operating systems, and you can arrange your own individual combinations of virtual machines, storage and server blades together with a wide-ranging selection of internal and external connections, such as Ethernet, Fibre Channel, SAS and InfiniBand. And as business requirements change, the Fujitsu PRIMERGY Blade Servers can be adapted to meet individual needs in a suitable manner.

PRIMERGY BX400 S1

The Fujitsu PRIMERGY BX400 is a fully-featured blade system built from the ground up to be user-friendly and versatile, helping you meet large-scale computing and storage requirements. It provides an optimum combination of up to eight server or storage blades in a small enclosure, supported by a comprehensive set of solutions and services. It combines server, storage and networking into a single chassis in order to convert it into a small data center with impressive input/output flexibility and bandwidth known from the PRIMERGY BX900. Its modular design makes the PRIMERGY BX400 more affordable than other blade servers, while also maximizing the use of limited office space with a compact footprint. Two different system versions of the PRIMERGY BX400 are available to suit different requirements. The rack version can be integrated easily into an industry standard 19-inch racks. Alternatively, the floor-stand version with low noise levels of only 45 decibels can be installed under a desk or in a reception area without distracting employees. In fact, it is one of the quietest blade servers available.
Easy to install, configure and manage, the PRIMERGY BX400 allows companies to spend less time on set-up and management, and focus on the core business processes essential for profitability. Fujitsu's PRIMERGY BX400 offering is enhanced by a comprehensive set of packaged services that support your IT team throughout the implementation process. From training, consulting and integration support and financing to detailed IT optimization, our services help you realize the full potential of your technology and keep your environment up and running.

Green IT

Features & Benefits

Main Features	Benefits
Tailor-made for your business	
■ The Fujitsu PRIMERGY BX400 provides an optimum combination of up to eight server or storage blades in a small enclosure that is available as 6U rack- and floorstand-version. ■ Combines server, storage and networking into a single chassis in order to convert it into a small data center and to deploy PRMERGY BX400 into an everyday office environment.	■ Modular infrastructure to meet office and datacenter environments, designed to share components throughout the family making it easy to create, customize and grow.
State-of-the-art technology	
■ Latest Intel® Xeon® processors, scalable memory configurations and flexible dual-channel 10GbE Converged Network Adapter (CNA) to provide a common infrastructure for LAN and SAN with fine-tunable bandwidth for network and/or storage I/O. ■ Ideal suited as complement to x86 server virtualization with additional benefits such as improved manageability, availability, and operational efficiency from shared cable infrastructures or virtual input/output (I/O).	■ Its smart design makes the PRIMERGY BX400 more flexible than other server solutions, offering easy scalability to protect your investments.
Simple to manage - Easy to control	
■ With ServerView you manage your servers and enclosures locally and remotely and take complete control regardless of the state of the server operating system. ■ Additional software components to simplify the management of PRIMERGY servers in LAN and SAN environments while providing highest flexibility for deployment and operation.	■ Simplified lifecycle management cuts server administration time by up to 60 percent, saving you even more effort and money.
Green in the Box	
■ Thanks to its highly efficient components, advanced cooling technology, and potent power management tools, the Fujitsu PRIMERGY BX400 also reduces cooling and air conditioning costs.	■ More efficient use of power and cooling to save energy costs as never before.
Affordable IT operations	
■ Modular upgrade options for server- or storage blades provide the flexibility to integrate new technologies into existing environments. ■ Additional server blades or components can be easily added or replaced without the re-cabling that usually requires multiple man-hours or complicated processes. ■ Fujitsu's PRIMERGY BX400 offering is enhanced by a comprehensive set of packaged services that support your IT team throughout the implementation process.	■ The consolidated design makes the PRIMERGY BX400 more affordable than traditional rack or tower servers, storage and networking solutions offering lower total operational costs.

Technical details

Enclosure	
System unit type	6 U chassis for 19-inch rack, or floorstand version
Front bays	8 half height bays for server or storage blades
Midplane	High speed midplane with 3 fabrics
Rear bays	4 x for Connection Blades 4 x for PSU/fan modules
Management Blades	1x hot-plug management blade as standard, redundant management blades as option
Fan configuration	Up to 3 additional hot plug, redundant fan modules
Power supply configuration	Up to 4x hot-plug power supply modules (1x as standard)
Operating panel	
Operating buttons	On/off switch ID button
Status LEDs	Power (amber / green) System status (orange / yellow) Identification (blue)
Service display	ServerView Local Service Display for Blade (LSB)
ODD	1 - assinged to server blade by MMB control
USB ports	2 - assigned to server blade by MMB control
Management Blade	
Type of Unit	BX900 MMB S1
LAN / Ethernet (RJ-45)	2 x 1Gb Ethernet
Service LAN (RJ45)	Dedicated Service LAN port for MMB (1Gb Ethernet)
Serial 1 (9-pin)	1 x RS-232-C
USB ports	2 x (at rear side of the system)
Dimensions / Weight	
Floor-stand (W x D x H)	366 x 819 x 578 mm
Rack (W x D x H)	445 x 785 x 267 mm
Mounting Depth Rack	818 mm
Height Unit Rack	6 U
19" rackmount	Yes
Weight	Rack: up to 98 kg / Floorstand: up to 112.5 kg
Weight notes	Fully assembled Actual weight may vary depending on configuration
Rack integration kit	Included in Rack System
Electrical values	
Max. input of single power supply	1200 W / 1785 W (100 V - 240 V)
Power supply configuration note	max. 4 PSU in n, n+1 or n+n redundancy configuration.
Power supply efficiency	92 % (80 PLUS gold)
Rated voltage range	100 V - 240 V
Rated frequency range	50 Hz - 60 Hz
Rated current max.	45 A / 22.5 A (100 V - 240 V)
Electrical value notes	To estimate the power consumption of different configurations use the Power Calculator of the System Architect: http://configurator.ts.fujitsu.com/public/
Environmental	
Operating ambient temperature	5 - 35°C
Operating environment	FTS 04230 – Guideline for Data Center (installation locations)
Operating environment Link	http://docs.ts.fujitsu.com/dl.aspx?id=e4813edf-4a27-461a-8184-983092c12dbe
Noise emission	Measured according to ISO 7779 and declared according to ISO 9296

Environmental

Sound pressure (LpAm)	up to 61.5 dB(A) (operating), 45.5 dB(A) (standby); 45 dB(A) operating in Low Noise mode
Sound power (LWAd; 1B = 10dB)	7.4 B (operating), 6.1B (standby)

Compliance

Germany	GS
Europe	CE Class A *
USA/Canada	ULc/us FCC Class A
Global	CB RoHS WEEE
Japan	VCCI Class A + JIS 61000-3-2
Australia/New Zealand	C-Tick
Taiwan	BSMI
Compliance notes	There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons can be applied for on request.
Compliance link	http://sp.ts.fujitsu.com/sites/certificates/

Server and Storage Blades pluggable into system unit front side

Product Model name	Product Type	Processor quantity support	Max. number per BX400	Memory slots total	Supported capacity RAM (max.)
PRIMERGY BX920 S3	Dual Socket Server Blade (Intel) http://docs.ts.fujitsu.com/dl.aspx?id=33efe617-f9a6-44cf-ac8a-ab5eadfe03f0	1 - 2	8	12	384 GB
PRIMERGY BX924 S3	Dual Socket Server Blade (Intel) http://docs.ts.fujitsu.com/dl.aspx?id=4f5c04d4-b7d3-4fc5-af8c-b65f845d2b52	1 - 2	8	24	768 GB
PRIMERGY SX910 S1	Storage Blade Tape http://docs.ts.fujitsu.com/dl.aspx?id=cc5ba5c8-2c98-4647-b585-db5890f9243c		4		
PRIMERGY SX940 S1	Storage Blade Disk http://docs.ts.fujitsu.com/dl.aspx?id=cabbdb01-8a40-44dd-af4d-50bc074c0ec8		4		
PRIMERGY SX960 S1	Storage Blade Disk http://docs.ts.fujitsu.com/dl.aspx?id=489d2a0c-81f1-4d3e-aaa3-df55ac446930		2		
PRIMERGY SX980 S1	Storage Blade Disk http://docs.ts.fujitsu.com/dl.aspx?id=b4de3482-a07c-4cda-8f9c-de4e3869291b		max. 3, (for the US market max. 2x SX980 S1 can be installed)		

Connection Blades (CB) pluggable into system unit rear side

Connection type	Down-link ports	Up-link ports	Max. number per BX400
Eth Switch/IBP 1Gb 36/12	36 x 1 Gbit/s Eth	8 x 1 Gb (RJ45), 4 x 1 Gb (SFP)	4 (CB Slot 1/2 3/4)
Eth Switch/IBP 1Gb 36/8+2	36 x 1 Gbit/s Eth	8 x 1 Gb (RJ45) , 2 x 10 Gb (SFP+)	4 (CB Slot 1/2 3/4)
Eth Switch/IBP 10Gb 18/8	18 x 10 Gbit/s Eth	8 x 10 Gb (SFP+)	4 (CB Slot 1/2 3/4)
FC Switch 8Gb Brocade 26 Port Enterprise	18 x 8 Gbit/s FC	8 x 4/8 Gb (SFP/SFP+)	2 (CB Slot 3/4)
FC Switch 8Gb Brocade 14 Port	18 x 8 Gbit/s FC	8 x 4/8 Gb (SFP/SFP+)	2 (CB Slot 3/4)
FC Switch 8Gb Brocade 26 Port	18 x 8 Gbit/s FC	8 x 4/8 Gb (SFP/SFP+)	2 (CB Slot 3/4)
IB Switch 40Gb 18/18	18 x 40 Gbit/s IB	18 x 40 Gb (QSFP)	1 (CB Slot 3/4)
FC Pass Thru 8Gb 18/18	18 x 8 Gbit/s FC	18 x 4/8 Gb (SFP/SFP+)	2 (CB Slot 3/4)
Eth Pass Thru 10Gb 18/18	18 x 1/10 Gbit/s Eth	18 x 1/10 Gb (SFP/SFP+/Twinax)	4 (CB Slot 1/2 3/4)

Connection Blades (CB) pluggable into system unit rear side

Connection type	Down-link ports	Up-link ports	Max. number per BX400
Eth Switch/IBP 1Gb 18/6	18 x 1 Gbit/s Eth	6 x 1 Gb (RJ45)	4 (CB Slot 1/2 3/4)
SAS Switch 6Gb 18/6	18 x 6 Gbit/s SAS	6 x 6 Gb SAS	1 (CB Slot 3)
IB Switch 56Gb 18/18	18 x 56 Gbit/s IB	18 x 56 Gb (QSFP)	1 (CB Slot 3/4)
Eth Fabric Switch 10Gbit/s 18/6+6 Brocade VDX 2730	18 x 10 Gbit/s Eth	6 x 10 Gb Eth (SFP+) 6 x 4/8 Gb Fibre Channel (SFP/SFP+)	4 (CB Slot 1/2 3/4)
Eth FEX 10Gb 16/8	16 x 10 Gbit/s Eth	8 x 10 Gb (SFP+)	4 (CB Slot 1/2 3/4)

Warranty

Standard Warranty	3 years
Service level	On-site Service (depending on country)

Maintenance and Support Services - the perfect extension

Recommended Service	7x24, Onsite Response Time: 4h - For locations outside of EMEA please contact your local Fujitsu partner.
Spare Parts availability	5 years
Service Lifecycle	5 years after end of product life
Service Weblink	http://www.fujitsu.com/fts/services

More information

Fujitsu OPTIMIZATION Services

In addition to Fujitsu PRIMERGY BX400 S1, Fujitsu provides a range of platform solutions. They combine reliable Fujitsu products with the best in services, know-how and worldwide partnerships.

Fujitsu Portfolio
Build on industry standards, Fujitsu offers a full portfolio of IT hardware and software products, services, solutions and cloud offering, ranging from clients to datacenter solutions and includes the broad stack of Business Solutions, as well as the full stack of Cloud offering. This allows customers to leverage from alternative sourcing and delivery models to increase their business agility and to improve their IT operation's reliability.

Computing Products
www.fujitsu.com/global/services/computing/

Software
www.fujitsu.com/software/

More information

Learn more about Fujitsu PRIMERGY BX400 S1, please contact your Fujitsu sales representative or Fujitsu Business partner, or visit our website.
http://www.fujitsu.com/

Fujitsu green policy innovation

Fujitsu Green Policy Innovation is our worldwide project for reducing burdens on the environment.
Using our global know-how, we aim to contribute to the creation of a sustainable environment for future generations through IT.
Please find further information at http://www.fujitsu.com/global/about/environment/

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